Updating Concepts and Methods for National Accounts: The Intersection of Economic Policy and Statistics

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Policy and Business Needs and the U.S. National Accounts

- U.S. Accounts were developed in response to policy and business needs
- 1920's: Earliest accounts were balance of payments accounts that were developed to provide:
  - Essential information for trade policy, tariff receipts, and foreign aid
  - Later expanded to address issues raised by lend-lease, Marshall Plan, GATT, and Bretton-Woods

Policy and Business Needs and the U.S. National Accounts

- 1930's – Great Depression revealed information gap, motivating the development of national income accounts
  - Presidents Hoover and then Roosevelt tried to combat the Great Depression based on incomplete data – stock price indexes, freight car loadings, and incomplete indexes of industrial production
  - In response, Department of Commerce commissioned Simon Kuznets (Nobel laureate) to develop a set of national economic accounts
- 1940's – World War II planning needs drove development of expenditure estimates (GNP)

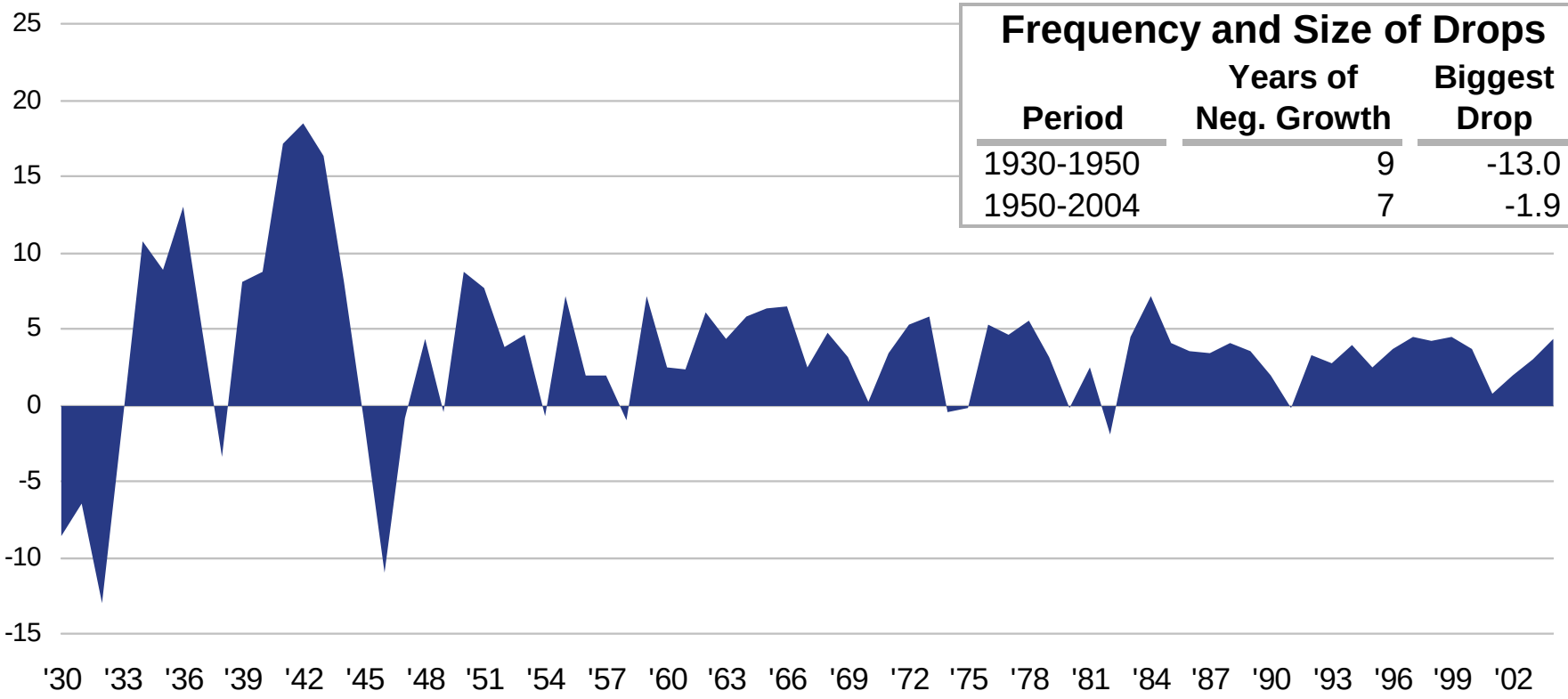
The Value of National Accounts

- "While the GDP and the rest of the national income accounts may seem to be arcane concepts, they are truly among the great inventions of the twentieth century."
  - "Much like a satellite in space can survey the weather across an entire continent, so can the GDP give an overall picture of the state of the economy. It enables the president, Congress, and Federal Reserve Board to judge whether the economy is contracting or expanding, whether the economy needs a boost or should be reined in a bit, and whether a severe recession or inflation threatens U.S. Accounts were developed in response to policy and business needs"
    - Robert Samuelson and William Nordhaus, Economics, 15th Edition

The Value of National Accounts

Annual GDP Growth

(Percent growth)



Frequency and Size of Drops

Period	Years of Neg. Growth	Biggest Drop
1930-1950	9	-13.0
1950-2004	7	-1.9

Policy and Business Needs and the U.S. National Accounts

- 1940's – World War II planning needs drove development of expenditure estimates (GNP)
  - Income and product estimates (estimated using what are now known as income and expenditures methods)
- 1940's and 1950's – WWII OSS planning needs and post-war demobilization fostered Nobel Laureate Leontief's creation of input-output accounts

Adapting to the Economy While Meeting Policy and Business Needs

- Late 1950's to early 1960's – Focus on sources of growth
  - Regular 5-year benchmark input-output tables and "production approach" estimates of GNP
  - Capital stock estimates
  - More detailed and timely state and local personal income estimates
- Late 1960's to 1970's – Accelerating inflation
  - Improved price and inflation-adjusted output measures
- 1980's – Internationalization and computers
  - Expanded estimates for trade in services
  - BEA/IBM partnership – hedonic techniques

Adapting to the Economy While Meeting Policy and Business Needs

- 1990's – Rapid adoption of technology with falling prices
  - Introduced chain-type indexes
  - Developed computer software investment estimates
  - Incorporated new measures of high-tech products and banking output
- 2000's – Problems with budget forecasts, monitoring of business cycles, and measurement of profits
  - Improved estimates for financial institutions, wages & salaries, profits, and high-tech products
  - Renewed focus on data dissemination methods – internet, easier and faster availability of more data

Who Uses BEA Data?

- GDP and National Accounts
  - White House and Congress to prepare budget estimates and projections
  - Federal Reserve to set interest and exchange rates
  - Wall Street as a primary indicator of national economic activity
  - Business community to plan financial and investment strategies

Who Uses BEA Data?

- Industry Data
  - Industry and academia to conduct industry studies on productivity
  - U.S. International Trade Commission to measure the impact of trade policies
  - Trade associations to assess cross-industry impact of economic and regulatory changes
  - National and local leaders to assess impact of economic shocks, such as terrorist attacks or natural disasters, on particular industries

Who Uses BEA Data?

- International Trade and Investment Data
  - Analysts and policymakers to assess the impact of international investment and trade (i.e., globalization)
  - Business managers to assess market size, judge market direction, and assess their market shares
  - Trade association officials to identify key export markets, and to assist in deliberations of trade or investment agreements
  - Federal government agencies to calculate international price indexes and understand behavior of multinational companies

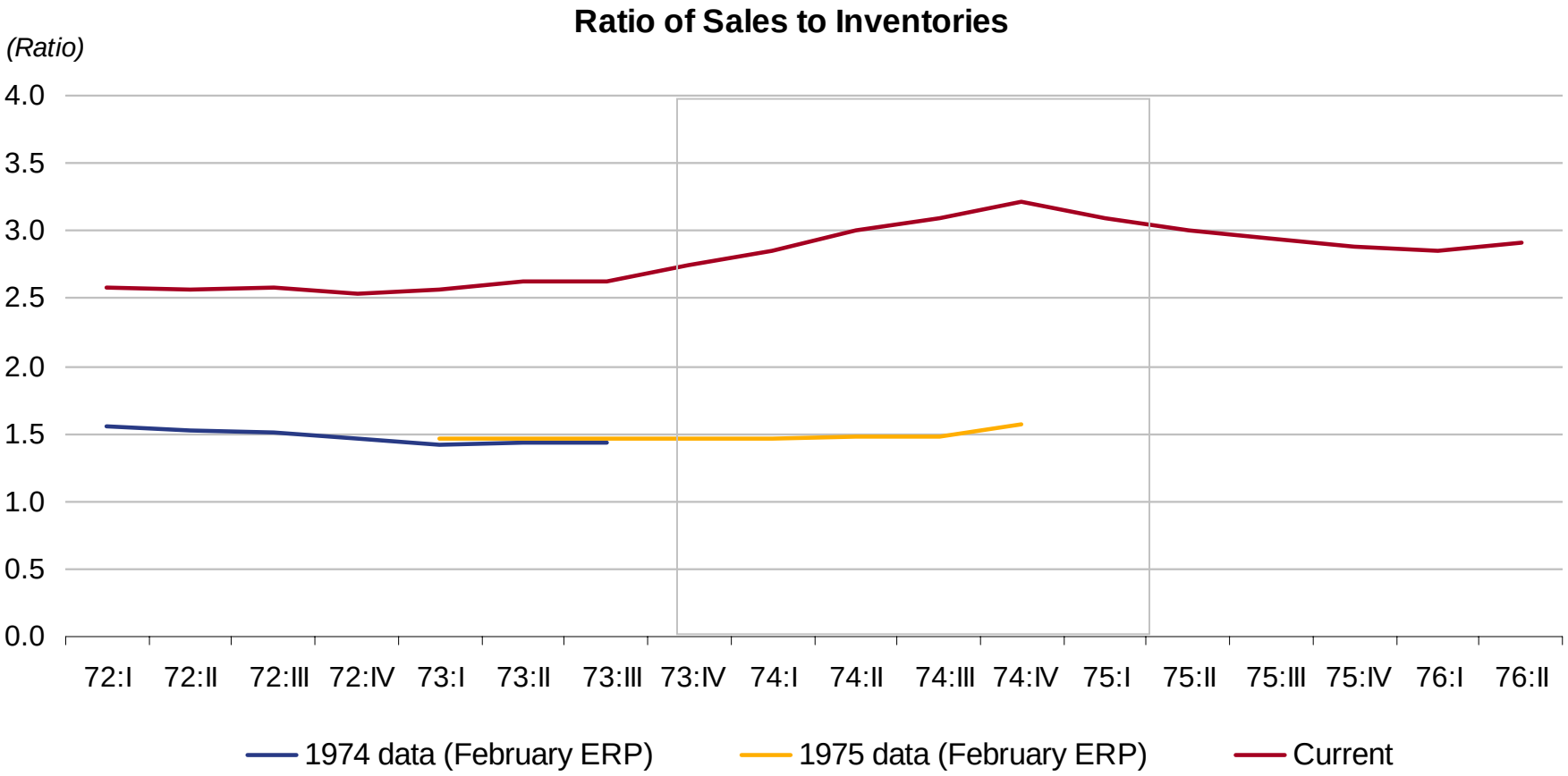
Who Uses BEA Data?

- Regional Estimates (State Personal Income, Gross State Product, and Regional Multipliers)
  - Federal government to distribute over $190 billion in federal funds
  - State governments to plan state spending, make revenue estimates, and track the state economy
  - Business and development officials to measure the impact of business development on regional growth

The U.S. Experience – Examples of the Payoffs from Updating the Accounts

- The first example is from the 1970's when there were problems in accounting for inventories during a period of high inflation:
  - Policymakers and business decision makers using the data failed to see the inventory buildup and subsequent liquidation that contributed to the 1971-1972 recession
  - BEA responded by developing inventory valuation that more accurately reflected the cost of replacing inventories

The U.S. Experience – Examples of the Payoffs from Updating the Accounts



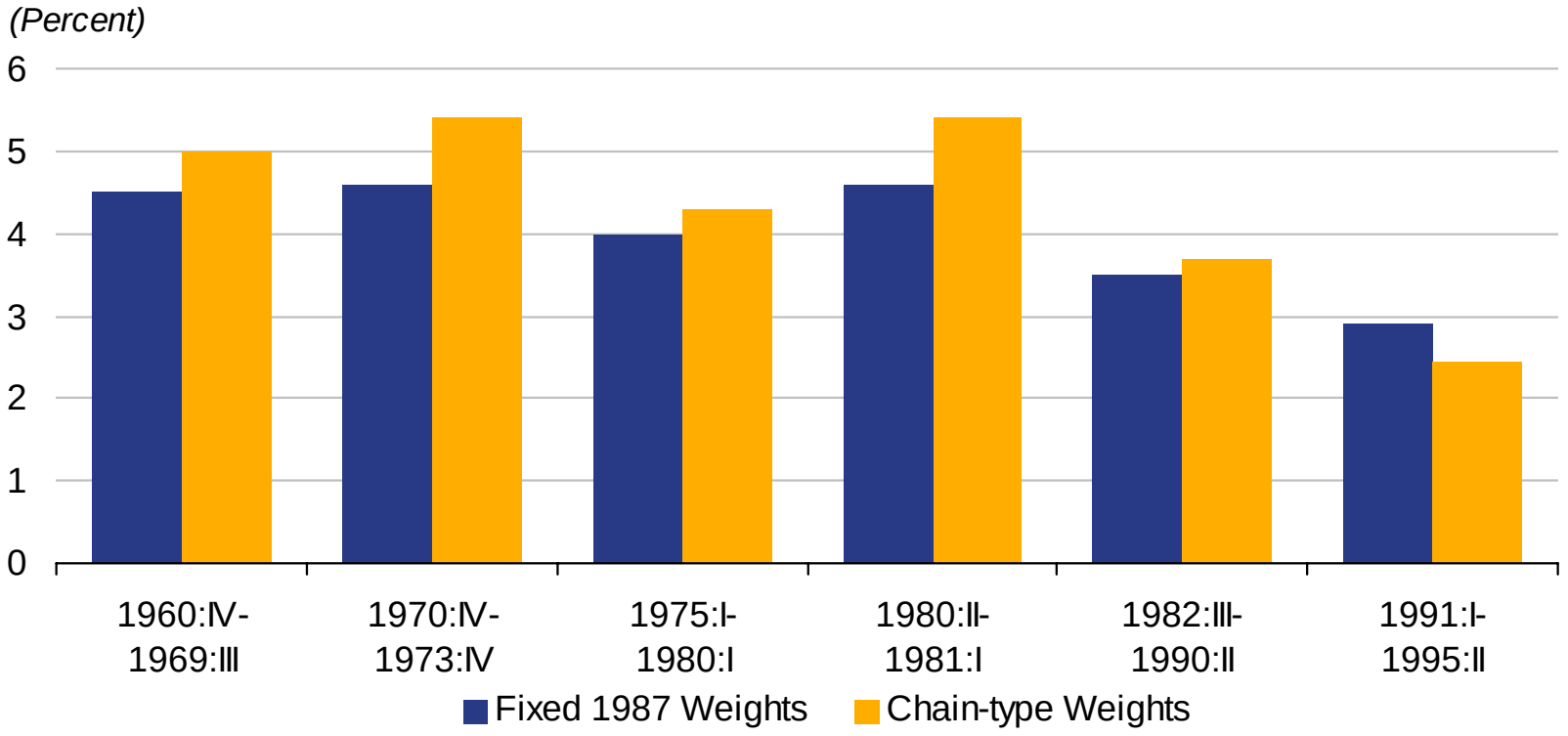
Note: The series differ in their definition between 1974/1975 and Current.

The U.S. Experience – Examples of the Payoffs from Updating the Accounts

- The second example is from the 1980's and 1990's when large changes in the prices of computers, agricultural products, and oil caused biases in real GDP and inflation:
  - As a result, BEA moved to chain indices that produce more accurate and unbiased estimates of inflation, productivity, and growth
  - Initial resistance, followed by widespread acceptance and adoption in the United States and abroad

Chain-type Measures

Rates of Change in Real GDP: Comparison of Alternative Measures During Economic Expansions

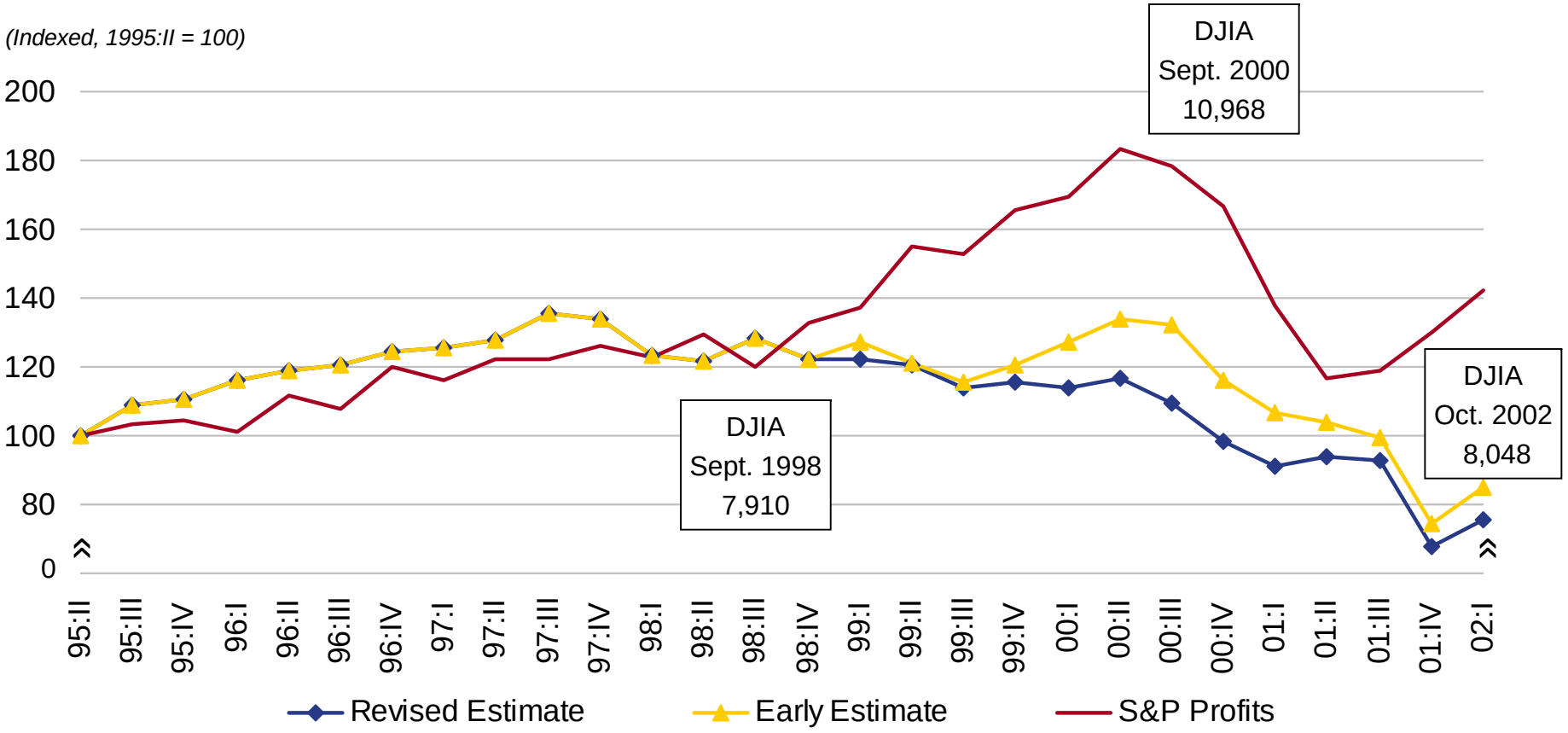


Source: Historical BEA tables.

The U.S. Experience – Examples of the Payoffs from Updating the Accounts

- The third example is from the first half of 2000's, when stock options and other accounting issues obscured the picture of corporate profits and contributed to the large stock market correction that had a role in 2001 downturn:
  - BEA responded by developing a more accurate and more timely measure of stock options and their impact on profits
  - This new measure gives businesses and individuals a much improved basis to guide the Xxx trillion they have invested in U.S. financial markets

Corporate Profits – 2002 Annual Revision



Source: Bureau of Economic Analysis and Standard & Poor's, Inc.

The U.S. Experience – Lessons Learned

- The importance of making the case for changes in economic statistics
- The essential role of professionalism and organizational independence in maintaining public confidence in the accuracy and objectivity of the data
- The advantages of a decentralized system in fostering innovation
- The importance of timely data that is substantively – but not exactly – correct